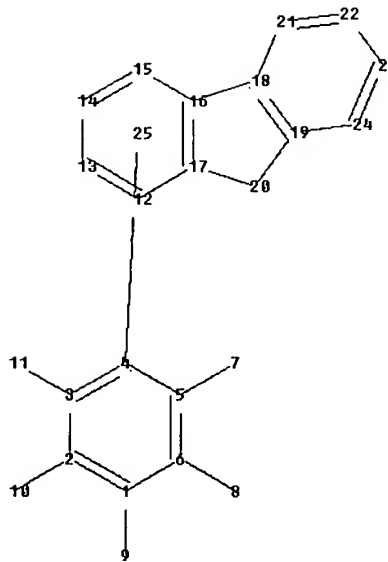
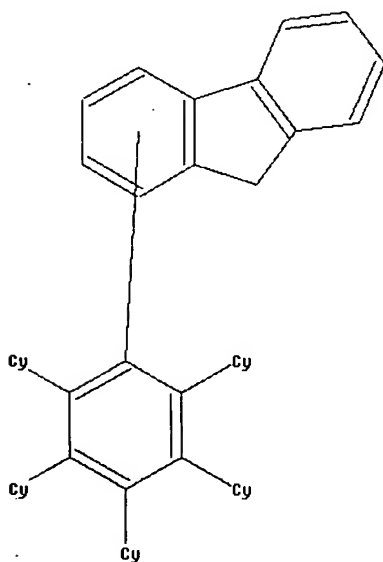


10/522,947

=> file reg

FILE 'REGISTRY' ENTERED AT 07:08:23 ON 08 JUN 2007



chain nodes :

7 8 9 10 11

ring nodes :

1 2 3 4 5 6 12 13 14 15 16 17 18 19 20 21 22 23
24

chain bonds :

1-9 2-10 3-11 5-7 6-8

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 12-13 12-17 13-14 14-15 15-16
16-17 16-18 17-20
18-19 18-21 19-20 19-24 21-22 22-23 23-24

exact/norm bonds :

1-9 2-10 3-11 5-7 6-8 16-18 17-20 19-20

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 12-13 12-17 13-14 14-15 15-16
16-17 18-19 18-21
19-24 21-22 22-23 23-24

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom
9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom
18:Atom 19:Atom 20:Atom 21:Atom

22:Atom 23:Atom 24:Atom 25:Atom

=> s l1 sss ful

L3 14 SEA SSS FUL L1

=> file hcaplus

FILE 'HCAPLUS' ENTERED AT 07:15:11 ON 08 JUN 2007

=> s l3

L4 8 L3

=> dis l4 1-8 bib ab hit

L4 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:569883 HCAPLUS <<LOGINID::20070608>>
DN 143:86406
TI Organic electroluminescent device
IN Yamada, Naoki; Saito, Akito; Suzuki, Koichi; Senoo, Akihiro;
Tanabe,
Hiroshi; Hiraoka, Mitsuho; Negishi, Chika
PA Canon Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 58 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.
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DATE	-----	----	-----	-----
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PI	JP 2005174735	A	20050630	JP 2003-413069
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20031211

PRAI	JP 2003-413069	20031211
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OS MARPAT 143:86406

AB Disclosed is an organic electroluminescent device comprising
an

electroluminescent layer containing a compound represented
by

Ar1(C.tplbond.C)nAr2 [Ar1 and Ar2 = aryl, heterocyclic,
condensed

polycyclic aromatic, etc.; n = 1-5 integer].

IT	349666-25-7	349666-26-8	349666-27-9	441352-90-5
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475461-36-0

569343-08-4	608130-98-9	668994-19-2	668994-20-5
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669773-52-8

669773-63-1	855519-27-6	855519-28-7	855519-29-8
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855519-30-1

855519-31-2	855519-32-3
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RL: DEV (Device component use); USES (Uses)

(host material; organic electroluminescent device)

L4 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:563918 HCAPLUS <<LOGINID::20070608>>
DN 143:86390
TI Organic electroluminescent device
IN Yamada, Naoki; Saito, Akito; Suzuki, Koichi; Senoo, Akihiro;
Tanabe,
Hiroshi; Hiraoka, Mitsuho; Negishi, Chika
PA Canon Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 53 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.
DATE	-----	----	-----	-----
PI	JP 2005174736	A	20050630	JP 2003-413070
20031211				
PRAI	JP 2003-413070		20031211	
OS	MARPAT 143:86390			
AB	Disclosed is an organic electroluminescent device comprising an electroluminescent layer containing bisacetylene represented by YC.tplbond.CXC.tplbond.CZ [Y and Z = aryl, heterocyclic, condensed polycyclic, etc.; X = arylene, alkylene, cycloalkylene, etc.].			
IT	349666-25-7	349666-26-8	441352-90-5	475461-15-5
475461-36-0				
	475461-37-1	549528-98-5	608130-98-9	668994-19-2
668994-20-5				
	669773-52-8	669773-60-8	768398-72-7	855519-27-6
	855519-31-2	855520-00-2	855520-01-3	
	RL: DEV (Device component use); USES (Uses) (host material; organic electroluminescent device)			

L4 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:281574 HCAPLUS <<LOGINID::20070608>>
DN 142:363393
TI Aromatic compound derived from cyclopentadienone,
preparation method
thereof and electroluminescence (EL) element using the same
IN Cho, Hyun-Nam; Jung, Sung Hyun; Park, Seok-Jin; Lee, Seung-
Eun
PA Korea Institute of Science and Technology, S. Korea
SO U.S. Pat. Appl. Publ., 23 pp.
CODEN: USXXCO
DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.
DATE			

PI US 2005067955	A1	20050331	US 2004-937906
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20040910

KR 2005031034	A	20050401	KR 2003-67197
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20030927

JP 2005104981	A	20050421	JP 2004-279354
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20040927

PRAI KR 2003-67197	A	20030927	
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OS MARPAT 142:363393

AB There are disclosed an aromatic compound represented by the following formula

(I) (wherein m = an integer of 0-5; X = S, C R1R2,

CR1:CR1R2, C:NR1 or

C:NNR1R2; R1, R2, R3, R1', R2' and R3' may be the same with or different

from each other, and are independently selected from the group consisting

of H, C1-22 aliphatic alkyl group, C1-22 alicyclic alkyl, and alkoxy group,

and C6-18 aryl and aryloxy; Ar = an aromatic or heteroarom. group selected

from the group consisting of phenylene, naphthalene, anthracene, fluorene,

thiophene, pyrrole, pyridine, aryloxadiazole, triazole, carbazole,

arylamine, arylsilane and derivs. thereof) which is derived from

cyclopentadienone and can be used as a core material for an organic

electroluminescence element or other optical devices, and preparation method

thereof, and an EL element comprising the compound I in a light-emitting

layer. Thus, 2.0 g (5.25 mmol) tetraphenylcyclopentadienone and 0.27 g

(2.5 mmol) 1,4-diethynyl-2,5-dimethoxybenzene were put into a 100 mL

two-neck round bottom flask equipped with a stirrer, a thermometer and a

reflux condenser under an argon atmospheric, and 50 mL xylene was added thereto.

The temperature of the reaction mixture was gradually raised to 180°C.,

stirred at 180° for 24 h, cooled down to room temperature, and then

gradually dropped into ethanol, to obtain white solid which was filtered,

dried, recrystd. from a mixture of chloroform/ethanol,
filtered, and then
dried sufficiently in a vacuum oven at 40° to give 0.84 g
(37%
yield) terphenyl compound (II) (m.p. 340-342°).
IT 849176-74-5P, 1,4-Bis(2,3,4,5-tetraphenylphenyl)-2,5-
dimethoxybenzene
849176-75-6P 849176-76-7P 849176-77-8P 849176-78-9P
849176-79-0P 849176-80-3P 849176-82-5P, 3,6-Bis(2,3,4,5-
tetraphenylphenyl)-9-ethylcarbazole 849176-83-6P 849176-
87-0P,
1,4-Dimethoxy-2,5-bis(2,4,5-triphenylthiophen-3-yl)benzene
849176-88-1P
849176-89-2P 849223-42-3P 849223-43-4P
RL: DEV (Device component use); SPN (Synthetic preparation);
TEM
(Technical or engineered material use); PREP (Preparation);
USES (Uses)
(preparation of aromatic compds. derived from
cyclopentadienone, preparation method
thereof, and organic electroluminescence element using
them)

L4 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:263428 HCAPLUS <<LOGINID::20070608>>
DN 142:481816
TI Star-Shaped and Linear Nanosized Molecules Functionalized
with
Hexa-peri-hexabenzocoronene: Synthesis and Optical
Properties
AU Cao, Xiao-Yu; Hong, Zi; Zhang, Wei; Lu, Hua; Pei, Jian
CS Key Laboratory of Bioorganic Chemistry and Molecular
Engineering of
Ministry of Education College of Chemistry and Molecular
Engineering,
Peking University, Beijing, 100871, Peop. Rep. China
SO Journal of Organic Chemistry (2005), 70(9), 3645-3653
CODEN: JOCEAH; ISSN: 0022-3263
PB American Chemical Society
DT Journal
LA English
OS CASREACT 142:481816
AB A synthetic strategy promising the establishment of a new
star-shaped and
linear polycyclic aromatic hydrocarbons (PAHs) family with
distinct mol.
topologies has been developed. The Sonogashira reaction
between the
hexyl-substituted fluorene and truxene iodides and
phenylacetylene
catalyzed with Pd(0) affords oligophenylacetylenes in high
yields. The

Diels-Alder and decarbonylation reactions between the latter and tetraphenylcyclopentadiene following the oxidation by FeCl₃ produce the star-shaped and linear PAHs containing a five-membered ring. The structural anal. and the optical properties of all new compds. are performed by a combination of MALDI-TOF mass spectrometry, UV-vis, and fluorescence spectrometry. The electronic and photophys. properties are studied by orthogonal comparisons of the absorption and fluorescence spectra in THF solns., which not only give insight into the interactions among aromatic submoieties in each mol. and the effects of meta-conjugation and para-conjugation on electronic delocalization, but also indicate effective conjugation length variations from oligophenylacetylenes to oligophenylene dendrimers and PAHs. The star-shaped PAH exhibits the highest aggregation in excited states compared with the other four hexa-peri-hexabenzocoronene derivs.

RE.CNT 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 435332-91-5P 852042-88-7P 852042-89-8P 852042-90-1P
852042-91-2P

852042-92-3P 852042-93-4P 852042-94-5P

852042-95-6P 852042-96-7P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)

(preparation and photochem. properties of star-shaped and linear nanosized mols. functionalized with hexa-peri-hexabenzocoronene)

L4 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:920744 HCAPLUS <<LOGINID::20070608>>

DN 142:93505

TI Oligomers of Hexa-peri-hexabenzocoronenes as "Super-oligophenylenes":

Synthesis, Electronic Properties, and Self-assembly

AU Wu, Jishan; Watson, Mark D.; Tchegotareva, Natalia; Wang, Zhaohui;

Mueller, Klaus

CS Max-Planck Institute for Polymer Research, Mainz, D-55128, Germany

SO Journal of Organic Chemistry (2004), 69(24), 8194-8204
 CODEN: JOCEAH; ISSN: 0022-3263
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 142:93505
 AB Hexa-peri-hexabenzocoronene (HBC) is a remarkable polycyclic aromatic hydrocarbon and is often called superbenzene because of its similarity to benzene. The facile synthesis of oligomers of HBC, up to trimers with different modes of connection is reported. UV-vis and fluorescence spectroscopy studies reveal that the oligomers are electronically decoupled. This arises from the small AO coeffs. of the bridge-head carbon atoms, the large torsion angle between the HBC units, and the large distance of interacting transition dipoles due to the size of the HBC chromophore. For comparison, a methylene-bridged HBC dimer, so-called superfluorene, was prepared. The induced planarity improves p-conjugation and suppresses the geometrical relaxation of the backbone upon electronic excitation, leading to a prominent 0-0 transition band in the fluorescence spectra. The self-assembly of the oligomers and of superfluorene was studied by wide-angle X-ray diffraction (WAXD) in the bulk state, and ordered columnar stacking occurs in the HBC dimer, p-HBC trimer, and superfluorene. Measurements of shear-aligned samples show that, despite increasing aspect ratio by linear entrainment of disks, the anisotropic element that is subject to alignment by shear is the supramol. columns.
 RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 816466-81-6P 816466-82-7P 816466-83-8P 816466-85-0P
 816466-86-1P
 816466-87-2P 816466-88-3P 816466-89-4P 816466-90-7P
 816466-91-8P
 816466-92-9P 816466-96-3P 816466-97-4P 817192-97-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(synthesis, electronic properties, and self-assembly of
oligomers of
hexa-peri-hexabenzocoronenes as super-oligophenylenes)

L4 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:203783 HCAPLUS <<LOGINID::20070608>>
DN 140:261171
TI Condensed polycyclic compounds and organic light-emitting
device using the
same

IN Suzuki, Koichi; Kawai, Tatsundo; Senoo, Akihiro; Yamada,
Naoki; Saito,

Akihito; Okajima, Maki

PA Canon Kabushiki Kaisha, Japan

SO PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.
DATE			
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PI WO 2004020371	A1	20040311	WO 2003-JP10783
20030826			
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ,			
CA, CH, CN,			
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB,			
GD, GE, GH,			
GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC,			
LK, LR, LS,			
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,			
NZ, OM, PG,			
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,			
TM, TN, TR,			
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW,			
AM, AZ, BY,			
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,			
DK, EE, ES,			
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,			
SI, SK, TR,			
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,			
SN, TD, TG			
JP 2004107326	A	20040408	JP 2003-291191
20030811			
AU 2003256085	A1	20040319	AU 2003-256085
20030826			
US 2005236974	A1	20051027	US 2005-522947
20050202			
PRAI JP 2002-246600	A	20020827	

JP 2003-291191 A 20030811
WO 2003-JP10783 W 20030826
OS MARPAT 140:261171
AB The invention is directed to the preparation of condensed polycyclic compds. I
as (component) of organic light-emitting devices that are extremely efficient
in a light output with high luminance and is extremely durable [R1 = H,
halo, cyano, substituted amino or (un)substituted alkyl, aralkyl, aryl;
Ar1 to Ar5 = independently (un)substituted condensed polycyclic aromatic
group or condensed polycyclic heterocyclic group]. For example, Suzuki
cross-coupling of hexabromobenzene with 9,9-dimethylfluorene-2-boronic
acid gave 42% II and 17% all substituted 9,9-dimethylfluorenyl II. A
device fabricated using II in the active layer exhibited blue emission
with a luminance of 2800 cd/m2 at a c.d. of 10 mA/cm2.
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 361486-60-4 669773-54-0 669773-55-1 669773-56-2
669773-57-3
669773-58-4 669773-59-5 669773-60-8 669773-61-9
669773-62-0 669773-63-1 669773-64-2 669773-65-3
669773-66-4 669773-67-5 669773-68-6 669773-69-7
669773-74-4 669773-77-7 669773-78-8
RL: DEV (Device component use); USES (Uses)
(preparation of condensed polycyclic compds. and their use to the manufacture of
organic light-emitting devices)
IT 668994-19-2P 669773-52-8P 669773-53-9P
RL: DEV (Device component use); IMF (Industrial manufacture); SPN
(Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation of condensed polycyclic compds. and their use to the manufacture of
organic light-emitting devices)

L4 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:58421 HCAPLUS <<LOGINID::20070608>>
DN 138:128806
TI Light-emitting device and aromatic compound
IN Igarashi, Tatsuya; Qiu, Xuepeng
PA Fuji Photo Film Co., Ltd., Japan
SO PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.
DATE			
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PI WO 2003007658	A2	20030123	WO 2002-JP6998
20020710			
WO 2003007658	A3	20030703	
WO 2003007658	A8	20040219	
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ,			
CA, CH, CN,			
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB,			
GD, GE, GH,			
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,			
LC, LK, LR,			
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,			
NZ, OM, PH,			
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN,			
TR, TT, TZ,			
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW,			
AM, AZ, BY,			
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,			
DK, EE, ES,			
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR,			
BF, BJ, CF,			
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2002317506	A1	20030129	AU 2002-317506
20020710			
EP 1412450	A2	20040428	EP 2002-745913
20020710			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL,			
SE, MC, PT,			
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE,			
SK			
CN 1527871	A	20040908	CN 2002-813990
20020710			
JP 2004535051	T	20041118	JP 2003-513286
20020710			
TW 575540	B	20040211	TW 2002-91115468
20020711			
US 2004232409	A1	20041125	US 2004-483391
20040629			
PRAI JP 2001-211269	A	20010711	
JP 2001-329676	A	20011026	
WO 2002-JP6998	W	20020710	
OS MARPAT 138:128806			
AB Light-emitting devices comprising a pair of electrodes and a			
light-emitting layer or a plurality of organic layers			
comprising a			

light-emitting layer disposed between them are described in which the light-emitting layer or '1 of the organic layers comprising the light-emitting layer comprises '1 compound represented by the general formula I (Ar11, Ar12, Ar13, Ar14 and Ar15 = independently selected aryl or heteroaryl groups; Ar = a benzene ring, a naphthalene ring, a phenanthrene ring or an anthracene ring; '1 of Ar, Ar11, Ar12, Ar13, Ar14 and Ar15 is a condensed aryl group, a condensed or uncondensed heteroaryl group or a group comprising a condensed aryl group or a condensed or uncondensed heteroaryl group; Ar11, Ar12, Ar13, Ar14 and Ar15 are not bonded to each other to form a ring; R11 = a substituent; and n11 = an integer '0). Selected aromatic compds. corresponding to I are claimed.

IT 174357-75-6 174357-76-7 489429-60-9 489429-61-0
 RL: DEV (Device component use); USES (Uses)
 (light-emitting devices using aromatic compds. and aromatic compds.).

L4 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1974:37494 HCAPLUS <<LOGINID::20070608>>
 DN 80:37494
 TI Synthesis of a hybrid spiro-ladder polymer
 AU Bailey, William J.; Feinberg, Jay H.
 CS Dep. Chem., Univ. Maryland, College Park, MD, USA
 SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1972), 13(1), 287-91
 CODEN: ACPPAY; ISSN: 0032-3934
 DT Journal
 LA English
 AB The dispiro bisdiene 3,4,11,12-tetramethylene-1,6,9,14-tetraoxadispiro[6.2.6.2]octadecane (I) was prepared by heating 3,4,11,12-di(2'-dioxothiopropano)-1,6,9,14-tetraoxadispiro[6.2.6.2]-3,11-octadecadiene [obtained from 3,4-di(hydroxymethyl)-2,5-dihydrothiophene 1,4-dioxide and 1,4-cyclohexanedione] at 200-15.deg. for 45 min. to release SO2. The I was treated with the 20-membered tetramethylene glycol

maleate cyclic dimer in DMF 1 day at 5.deg., 8 days at room temperature, and 1

day at 76.deg. to yield 52% polymer (II) [50601-59-7]. II was infusible

but soluble in hexafluoroisopropanol at room temperature and in glutaronitrile

(III) at 180.deg.. When prepared in a III-CH₂Cl₂ mixture at 5.deg. for 1 day,

room temperature for 4 days, and 110.deg. for 1 day, the II was crystalline and was

soluble in CH₂Cl₂ at room temperature

IT 47187-39-3P 50601-58-6P 50601-59-7P 50906-78-0P

50906-79-1P

50979-25-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)